



Additional chart coverage may be found in CATP2, Catalog of Nautical Charts.

### SECTOR 3 — CHART INFORMATION

## SECTOR 3

### SOUTHWEST COAST OF IRELAND

**Plan.**—This sector describes the SW coast of Ireland between Mizen Head and **Loop Head** (52°34'N., 9°56'W.) and includes the River Shannon. The sequence of description is from S to N.

#### General Remarks

**3.1** The SW coast of Ireland between Mizen Head and Loop Head, 912 miles N, is characterized by bold mountainous peninsulas and deeply indented bays. Most of the coast is bordered by a predominantly rocky and cliffy shore, however, a few stretches of sandy beach fringe the heads of some bays and coves, and tidal flats are common. Most of the indentations are subject to heavy seas and swell from the North Atlantic, but several good partly protected anchorages are available in some of the bays as well as to leeward of the large islands.

**Winds—Weather.**—The climate on the SW and W coast is generally humid because of the prevailing SW and W winds. The summers are cloudy and relatively wet. The winters are usually windy with frequent rain; snow is rare. Although winds may be expected from any direction in any month, SW and W winds are more frequent than those from any other direction. Northerly winds are common in April W of Ireland.

Winds reach gale force most frequently in December and January when there is an average of 10 gale days per month. The months with fewest gales are from May to August. The wind reaches gale force or more only 1 to 3 days a month in June and July while in May and August, the number of gales exceeds 3 only in the area W of 15°W.

October to January are the wettest months and April to July are the driest. Thunderstorms are not common, but over the open sea and on the SW coast, however, there is little seasonal variation and thunderstorms may occur during the passage of a cold front at any time of the year. This condition may also occur when cold polar air passes over the relatively warm sea in late autumn or winter.

Fog is most common in June off the SW and W coasts of Ireland and in July in the area W of about 15°W. The greatest frequency occurs in the summer months. Land fog generally forms at the mouths of the rivers in autumn and winter and is dense in the first hour or two after sunrise. In settled weather, the coasts are often obscured by rain or drizzle and low clouds.

**Tides—Currents.**—The tides on the SW and W coasts of Ireland are semidiurnal. The range reaches a maximum of 4.6m at Galway, gradually decreasing S. The range is appreciably more in the estuary than anywhere on the coast, and attains a height of 5.6m at springs at Mellom and Limerick. In the larger estuaries, the range may also be greater near the head of the estuary than at the entrance.

The currents off the W coast of Ireland split to set in a N direction off the N part, and S off the S part. The points at which these currents meet are subject to considerable variations, especially in and off the estuaries where they are

subject to local conditions. The rates of the currents are usually moderate, but may become considerable off the salient points.

The offshore currents between The Bull and Fastnet Rock set in a NW-SE direction. The SE current begins about 2 hours 30 minutes after HW at Dover and the opposite current about 4 hours before HW at Dover. About 3 miles NW of The Skelligs, the currents setting N and S begin at about the same time as the currents just described. The spring rate in both directions is about 1 knot. Wind conditions increase or decrease this rate.

The currents up to 5 miles offshore between Mizen Head and Three Castle Head set in a NW-SE direction at a rate of about 1.5 knots at springs. Closer inshore, the currents between the heads set in a S direction when running E and NW when running W. The spring rate of the S current is about 3 knots off Three Castle Head and 4 knots off Mizen Head. The NW current attains a rate of 4 knots off Mizen Head, but is weak along the coast N and off Three Castle Head.

The currents W of Ireland are more or less rotary in a clockwise direction. It appears that the currents are weakest in WNW and ESE directions about 2 hours after HW at Dover and 4 hours before HW. Twenty to 30 miles offshore, the spring rate in the direction of the currents is probably not more than 0.8 knot with the currents becoming more rotary and weaker farther W, and more rectilinear and stronger as the coast is approached.

On the W coast of Ireland the sea level is raised by S and W winds, and decreased by winds from the opposite directions.

**Caution.**—Trawlers may be encountered off the SW coast of Ireland and in the major inlets.

Buoys moored in exposed positions off the W coast of Ireland may be off station after winter gales.

Oil platforms and exploration vessels may be encountered off the W coast of Ireland.

#### Off-lying Islands and Dangers

**3.2 The Bull** (51°35'N., 10°18'W.), the W of the islets lying W of Dursey Island, is 89m high, precipitous and steep-to; it is perforated in an E-W direction by an arched cavern, in which there is a depth of 9.1m. Detached rocks lie within 0.3 mile W from The Bull, terminating at Gull Rock, 6.1m high.

A main light, with a racon, is shown from a white tower, 15m high, standing on the seaward side of The Bull.

The Cow, an islet, 62m high, precipitous and steep-to, and in the NE end of which there is an arched cavern, lies about 1 mile ESE of The Bull. There are passages with considerable depth which are clear of dangers in the fairway on either side of The Cow. The tidal currents in these passages are strong and cause a breaking sea at times. A vessel should not proceed through them in foggy or stormy weather.

The Skelligs, consisting of two conspicuous pinnacled, rocky islets, lie about 14 miles NW of The Bull.

**Great Skellig** (51°46'N., 10°32'W.), the outer islet, rises to an elevation of 214m. On the high E part, there are the remains of a monastic establishment of the early Christian Ages, consisting of a walled enclosure, solid and unbroken after fourteen centuries, though built of dry masonry. Adjacent to it is a small square building of similar structure. Needle's Eye, the highest peak, rises from the NW part of the islet, and between it and the E elevated part is a deep depression, known as Christ's Valley. Washerwoman Rock, 1.8m high, lies 0.3 mile SW of Great Skellig, and 90m off its N end are two sunken rocks.



**The Cow looking SW**

A main light is shown from a white tower, 12m high, standing on the SW side of the islet. The remains of a disused lighthouse stand close NW of it.

Little Skellig, about 1 mile ENE of Great Skellig, is 131m high. A rock lies less than 90m from its S side. Lemon Rock, 21m high, lies about 2.2 miles NE of Little Skellig.

**3.3 Blasket Islands** (52°05'N., 10°40'W.) are a group of precipitous rocky islets, lying on the N side of the entrance of Dingle Bay. The depths around them are considerable and irregular, and the tidal currents are strong, causing, in unsettled weather, heavy breaking seas that are dangerous to small vessels, especially during gales from W.

Tearaght (Inishtearaght) Island, the W of the Blasket Islands, is 179m high, precipitous, and perforated by an archway which runs NE-SW. Some high, detached rocks lie about 0.2 mile W of the W extremity of the island, and two reefs, which dry 1.2 to 1.8m, lie within 0.2 mile S of them. Tearaght Rocks, 12.8m high and steep-to, lie about 0.4 mile farther W of the reefs. A main light is shown from a white tower, 17m high, on the island.

Inishtooskert, the N of the Blasket Islands, lies about 3.5 miles NE of Tearaght Island; its NW side consists of nearly vertical cliffs, 177m high, sloping SE. A rock, awash, over which the sea usually breaks, lies 0.3 mile SW of the SW extremity of the island, and between them are Carrigduff and another high rock.

The channel between Inishtooskert and Great Blasket Island, about 1 mile SE, and the islets and rocks N of the latter, has irregular depths, with tide rips in fine weather over the shoaler parts. There are heavy breakers during W gales over an 18.3m bank, about 1 mile S of Inishtooskert.

Great Foze Rock, the SW danger of the Blasket Islands, lies about 3 miles SSW of Tearaght Island; it is rugged and steep-to, with a 16.5m patch about 0.1 mile NW of it. Little Foze Rock, 0.8 mile NNE of Great Foze Rock, is 7.9m high, steep-to, and with a deep channel between them.

Inishvickillane and Inishnabro are two islands lying close together on the same bank about 2 miles SE of Tearaght Island; they are 134 and 174m high, respectively, and fringed by rocks, with off-lying dangers on the S and W sides of the bank. They are generally inaccessible, except from a small bay on the N side of Inishvickillane, where landing may be effected in fine weather and off which a small vessel may anchor, during settled weather and in W winds, in a depth of 18.3m, about 0.1 mile offshore.

**Fohish Rocks** (52°02'N., 10°36'W.), which dry 2.7m, lie 0.5 mile SE of the S extremity of Inishvickillane. Milkaunmore and Milkaunbeg are two rocks, above water, lying between Fohish Rocks and the SE end of the island.

**Directions.**—The SE extremity of Inishtooskert in range with Canduff Point, the SW extremity of Great Blasket Island, bearing about 006°, leads W of Fohish Rocks; Tearaght Island peak in range with Stack Rock (described below), bearing about 325°, leads SW of them.

**Thunder Rock** (52°02'N., 10°36'W.), 32m high, lies about 0.1 mile SSW of the S extremity of Inishvickillane, and is nearly connected to it by a sunken ridge. Stack Rock, above water, lies 0.1 mile off the W side of the same island, 0.8 mile NW of Thunder Rock. About 0.2 mile SW of Stack Rock is a rock which dries. Sound Rock, which dries 0.9m, lies about 0.2 mile E of the N extremity of Inishnabro. A shoal, with a least depth of 11m, lies 0.9 mile E of the E extremity of Inishvickillane.

**Directions.**—The two W peaks of Inishnabro in range, bearing about 041°, leads NW of Stack Rock and the dangers SW of it. Great Skellig, bearing 183° and well open E of Milkaunbeg, leads E of **Sound Rock** (52°04'N., 10°36'W.).

**3.4 Great Blasket Island** (52°06'N., 10°32'W.) lies with Canduff Point, its SW extremity, about 1 mile NE of Inishnabro; it is precipitous, especially on its NW side, and attains an elevation of 289m at Croaghmore, about 1 mile NE of Canduff Point. A ruined tower stands on the summit of a ridge, about 1.5 miles farther ENE. Close NW of Garraun Point, the E extremity of the island, is a landing place, off which a vessel may find temporary anchorage in fine weather, in a depth of 9.1m, sand. There is a depth of 3.7m about 90m E of Garraun Point.

**Illeunboy** (52°07'N., 10°31'W.), 11m high, with Carrigfadda, 11.9m high, close N of it, lies 270m NW of the N extremity of Great Blasket Island, with foul ground between. Several rocks, awash, lie within 0.2 mile W and NW of these two islets, and a group of sunken rocks and islets extends nearly 1 mile N from them. Near the N end of this group are Edge Rocks, 17.4 and 16.2m high, with a rock awash 0.1 mile farther N, and Connor Rocks, also awash, 0.2 mile farther NE. The bank on which these lie extends 0.5 mile farther N, with depths of 9.1 to 18.3m, and breaks heavily in bad weather.

**Beginish** (52°03'N., 10°30'W.), a rocky islet, with Young Islets close N, lies within 0.8 mile NE of the N extremity of Great Blasket Island. A rock, awash, lies 0.2 mile E of Young Islets; there is a depth of 4.6m over a group of pinnacles about 90m S of the rock. Theogh Rocks extend 0.1 mile S from the E side of Beginish.

**Barrack Rock** (52°01'N., 10°33'W.), with a depth of 8.2m and steep-to, breaks during gales, and lies 2.5 miles SE of Inishvickillane.

Wild Bank, formerly Three Fathom Pinnacle, lies 2.5 miles SSW of **Slea Head** (52°06'N., 10°27'W.); it has a least depth of 5.5m, over a pinnacle rising from a rocky bank, and general depths of 11 to 18.3m.

**Directions.**—**Clogher Head** (52°09'N., 10°29'W.) in range with the site of the tower on **Sybil Point** (52°11'N., 10°29'W.), bearing 015°, leads about 0.3 mile E of Barrack Rock, but passes within 0.1 mile of a 9.1m depth, 0.8 mile NE of Beginish Islet.

The S extremity of Tearaght Island seen over Canduff Point, bearing 274°, leads N of Wild Bank. The S extremity of Tearaght Island in range with the N end of Inishnabro, bearing 286°, leads 1 mile SW of Wild Bank.

**Caution.**—A local magnetic anomaly is reported to exist in the vicinity of the Blasket Islands.

**3.5 Three Castle Head** (51°29'N., 09°50'W.) which rises to an elevation of 111m within 0.4 mile of its extremity, lies about 2 miles N of Mizen Head (See Sector 1). The coast between is indented by Dunlough Bay; this small open bay is exposed to the prevailing winds and should be avoided. Foul ground extends about 0.5 mile SW from Three Castle Head and breaks in heavy weather.

Sheep's Head (Muntervary) lies about 3.5 miles N of Three Castle Head. It rises to an elevation of 168m within 0.5 mile inland. A light is shown from a white building situated at an elevation of 83m on the head. The head is the extremity of a promontory which separates Bantry Bay to the N, from Dunmanus Bay to the S.

Dunmanus Bay, entered between Sheep's Head and Three Castle Head, extends NE for 12.5 miles to its head. The bay affords ample room and safe anchorage for a large number of vessels, but there is no shelter for large vessels from SW gales in the outer part. Such gales send in a heavy ground swell as far as Carbery Island, which is heavier than that caused by gales from W or NW.

Dunbeacon Harbor, at the head of the bay, is mostly shallow and affords only limited anchorage for coasters and small craft. Dunbeacon Harbor is obstructed near mid-channel by shoals. The channel to the harbor between these shoals is 0.2 mile wide, with depths of 10 to 17m., shoaling to 5 to 10m off Dunbeacon Point.

As far as Carbery Island the shores of the bay are for the most part composed of rugged inaccessible cliffs, which are steep-to, but they are exposed to a heavy sea, particularly along the S shore.

The most prominent mountain peaks, which may be identified when approaching the bay, include Cruckna Sassenagh, 205m high, located about 1.8 miles ENE of Three Castle Head, Knocknamaddree, 311m high, located about 2.5 miles NE of Cruckna Sassenagh; Knockaphuca, 235m high, located about 1.7 miles ENE of Knocknamaddree; and Caher Mountain, 340m high, located about 4.8 miles NE of Sheep's Head.

## Bantry Bay (51°39'N., 9°40'W.)

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**3.6** Bantry Bay, which is entered between Sheep's Head and Black Ball Head, 7.5 miles WNW, extends NW for about 20 miles to its head. The bay is easy of access, free from dangers in the fairway, and with scarcely any tidal current. The holding ground is good, but the bay is exposed to W winds. Bear Haven on the N shore, Glengariff Harbor, and Whiddy Harbor near the head of the bay, afford secure anchorage to vessels of the deepest draft.

Depths leading into the bay are over 30m for about 16 miles, and then reduce to between 20 and 30m with several patches of less than 20m.

**Tides—Currents.**—The tidal currents are barely perceptible, except in the entrances to Bear Haven and Bantry Harbor. With strong S and SW winds, a current sets into the bay from Sheep's Head.

**Aspect.**—On approaching Bantry Bay from SW, Slieve Miskish Mountains, on the N side of the bay, will first be sighted. The most conspicuous peaks include Knockgour, 486m high, with a television mast on the summit, located about 3.2 miles NE of Black Ball Head; Knockoura, 487m high, located about 0.8 mile NNE of Knockgour; Miskish, 384m high, located about 1.5 miles NE of Knockoura; and Knocknagallaun, 374m high, located about 2 miles NW of Knockgour.

**Hungry Hill** (51°42'N., 9°47'W.), 682m high, with a pyramid on its summit, rises about 6.5 miles ENE of Miskish, and is easy to identify.

Bear Island, about 4.5 miles N of Sheep Head, is difficult to identify at a distance, but on a nearer approach, the towers W and E of its summit will assist in distinguishing it.

The S shore of the bay presents a series of inaccessible precipices. The mountain range, rising to an elevation of over 304m, 0.5 mile inland, causes heavy squalls with S and SE winds.

At White Horse Point on the S shore, about 9 miles NE of Sheep's Head, there is a conspicuous white patch on the cliff.

The N shore of Bantry Bay is of the same mountainous character as the S, but more indented.

**Black Ball Head** (51°35'N., 10°02'W.) is 81m high, surmounted by an old tower, and is a conspicuous feature when approaching the bay from W. Gull Rock, above water, lies close offshore, about 135m W of the head. During strong NW winds, its vicinity is subject to heavy squalls.

**3.7 Bear Island**, (51°38'N., 9°52'W.) which forms the S shore of Bear Haven, is high and rugged, and from its summit, Knockanalling, 270m high, it descends gradually towards the E end. A conspicuous ruined tower stands at an elevation of 209m about 1 mile W of Knockanalling. A prominent martello tower stands at an elevation of 164m about 1 mile ENE of Knockanalling and a martello tower with a flagstaff close E, stands at an elevation of 95m about 1.5 miles ESE of the same summit.

The S coast of the island is steep and cliffy, especially at its W end.

**Ardnakinna Point** (51°37'N., 9°55'W.) is the W extremity of the island. A main light is shown from a prominent white tower, 20m high, standing on the point.

Doonbeg Head, a prominent headland, 84m high, is situated 1.2 miles ESE of Ardnakinna Point. Greename Rock, 12m high, lies close off the S shore of the island, 1.2 miles E of Doonbeg Head. Feagh Rock, 0.9m high, lies about 0.3 mile S of Greename Rock. A rocky patch, with a depth of 7.3m and which breaks in W gales, lies about 0.5 mile E of Feagh Rock.

**Lonehort Point** (51°39'N., 9°47'W.) is the E extremity of the island. It is low and shelving, terminating in a dangerous reef on which stands a disused lighthouse. Carrigavaddra, a reef which dries, lies about 0.5 mile ESE of the point and is marked by a beacon.

**3.8 Bearhaven** (51°39'N., 9°51'W.) lies between Bear Island and the mainland to the N. This sheltered harbor is spacious, easy of access, and has good holding ground with depths of 12.8 to 18.3m. Although it can be entered from either E or W, the wider and deeper E entrance is preferred. With the exception of George Rock, about 1.7 miles within the E entrance, the fairway is clear of dangers. The buildings on the N side of the island are conspicuous when viewed from E.

**Caution.**—A prohibited anchorage area, best seen on the chart, lies in the E entrance to Bearhaven.

**3.9** The E entrance is deep and about 0.7 mile wide between the fringing dangers off Lonehort Point and Roancarrigmare Island. A detached 16.4m patch lies in the middle of the fairway, 0.7 mile E of Lonehort Point.

Roancarrigmare (Roancarrigmore) Island, flat topped, 6m high, and reef fringed, lies about 1.2 miles ENE of Lonehort Point. A main light is shown from a tower, 18m high, standing on the island. The lighthouse buildings, with a flagstaff close W, are enclosed by a prominent white wall.

Roancarrigbeg, N of Roancarrigmore Island, consists of several above-water rocks surrounded by reefs. The channel between the island and the rocks should not be attempted without local knowledge. A 9.1m patch lies in the middle of the channel, N of the rocks.

**Doucallia Rocks** (51°40'N., 9°44'W.), which dry, lie about 0.5 mile E of Roancarrigmore Island.

Bulliga Ledge, with a least depth of 3.6m, lies 0.7 mile NNE of Doucallia Rocks.

George Rock, with a least depth of 7m, lies in the middle of the fairway in the E part of Bear Haven about 1.7 miles WNW of Lonehart Point. A lighted buoy is moored close S of the rock.

**Lawrence Cove** (51°38'N., 9°48'W.), small in extent and encumbered by numerous dangers, indents the N side of Bear Island, W of Lonehart Point. The facilities within the cove are available only to small craft.

The dangers between Lawrence Cove and Long Point, the NW extremity of Bear Island, are contained within 0.1 mile of the shore. Along the N side of Bear Haven, between Roancarrigbeg and **Mill Cove** (51°39'N., 9°52'W.) to the W, the dangers to navigation lie within 270m of the shore.

**Hornet Rock** (51°39'N., 9°51'W.), with a least depth of 1.2m, lies at the outer end of a shoal which extends 0.2 mile S from the W entrance point of Mill Cove. A lighted buoy is moored 135m SE of the rock.

A stranded wreck, which is radar conspicuous, lies about 0.5 mile E of Hornet Rock and is marked by a lighted buoy.

Between Hornet Rock and Dinish Island to the W, the N side of Bearhaven is fringed by rocks, shoals, and other dangers.

**3.10** The W entrance lies between Fair Head and Ardnakinna Point to the ENE. The narrowest part of the navigable channel is 228m wide abeam of Piper Point, about 0.5 mile within the entrance. The least depth in the fairway is 7.9m.

The W side of the entrance between Piper Point and Drom Point to the NNE is indented by several small bays and coves.

Harbor Rock, consisting of several pinnacles, lies on the W side of the fairway, 0.3 mile NNE of Piper Point.

Colt Rock, which is detached and dries 2.1m, lies about 0.2 mile farther NNE; a beacon with a red horse topmark stands on the rock.

The dangers on the E side of the fairway are contained within 0.1 mile of the W side of Bear Island.

**Dinish Island** (51°39'N., 9°54'W.), about 1.7 miles NNE of Ardnakinna Point, lies on the N side of Bearhaven. The island is connected by a bridge to the mainland.

A direction light, shown from a white hut, 6m high, is situated on the SW end of the island. A beacon stands at an elevation of 12m about 0.3 mile NNE of the hut. By day the alignment of the hut and beacon, and at night the white sector of the light, lead through the W Entrance.

**Walter Scott Rock** (51°39'N., 9°54'W.) lies at the outer end of the foul ground extending from the S side of Dinish Island and consists of two adjoining heads with depths of 2.7 and 5.2m. A lighted buoy marks the S side of Walter Scott Rock.

**Anchorage.**—Anchorage for large vessels in Bearhaven is in the E part, between Lonehort Point and George Rock, in 12.8 to 16.5m, mud and sand, taking care to avoid the rocky patch and irregular soundings. There is a least depth of 13.7m, lying 0.3 mile N of Lonehort Point. A vessel may, however, anchor anywhere in the fairway between George Rock and Hornet Rock, in 10.1 to 12.8m.

Anchorage is prohibited in the charted area between Bear Island and the mainland, close NW of the East Entrance.

**Caution.**—Care should be taken to avoid the submarine cables which extend SSE to Bear Island from a position on the mainland about 1 mile E of Dinish Island.

**3.11 Castletown Bearhaven** (51°39'N., 9°54'W.) is a major fishing port situated close NW of Dinish Island. It is approached from the W end of Bearhaven.

**Tides—Currents.**—Tides rise about 3.5m at MHWS and 0.5m at MLWS. Small craft and fishing vessels of up to 1,000 tons with drafts of up to 4.5m use the harbor.

**Depths—Limitations.**—Alongside berths are located on the mainland side of the harbor and on the N side of Dinish Island. Depths alongside the berths are 3.7 to 4.9m.

**Aspect.**—The entrance from Bear Haven through the fairway W of Dinish Island is indicated by range lights, in line, bearing 010°. A large square hotel building stands on the W side of the entrance and is prominent. A chapel with a high roof and pointed belfry stands close W of the range lights and is conspicuous.

**Pilotage.**—The port can be contacted on VHF. Pilots are not compulsory and there is no recognized pilot however, persons with local knowledge are available upon request.

**Bulliga Point** (51°40'N., 9°44'W.) lies on the N side of the bay, about 1.5 miles NE of the E entrance to Bear Haven. Adrigole Harbor, an inlet, is entered about 0.5 mile NE of Bulliga Point. It affords shelter to small craft, but is only suitable for vessels with drafts of less than 3m.

Small vessels may obtain temporary anchorage, in 12.8 to 14.6m, close to the entrance of Adrigole Harbor, with Roancarrigmore Light well open SE of Bulliga Point, bearing about 222°.

**Shot Head** (51°40'N., 9°40'W.), about 2 miles E of Bulliga Point, is fairly steep-to, and temporary shelter may be obtained NW of it during E winds.

Between Shot Head and Sheelane Islet, about 3.2 miles ENE, the shore is steep-to and free of dangers. The shore between Sheelane Islet and Four Heads Point to the NE is fringed by foul grounds as far as 0.2 mile offshore. Depths of 8.2 to 10m lie about 0.5 mile offshore in this same area.

**Glengarriff Harbor** (51°44'N., 9°32'W.), entered between **Crowdy Point** (51°43'N., 9°33'W.) and Gun Point to the NE, is divided into an inner and outer part by Garinish Island. This island, together with two islets E of it, lies on an extensive shoal extending from the W shore. The narrow channel leading into the inner harbor passes E of this shoal. The channel W of the island is foul. A conspicuous tower, 41m high, stands on the summit of Garinish Island.

Several detached dangers lie on the W side of the outer harbor between Crowdy Point and the E end of the above shoal.

The E side of the harbor is steep-to close offshore, but foul off its N and W sides above Garinish Island.

A conspicuous gray house with three chimneys stands on the E side of the harbor about 0.7 mile NE of Garinish Island. Glengarriff Castle, which is prominent, stands close SE of the gray house.

A conspicuous white house stands on the E side of the approach to the harbor, about 1.5 miles ESE of Garinish Island.

During the summer, good anchorage can be obtained, in 12.8 to 20.1m in the outer harbor S of Garinish Island.

Sheltered anchorage can be taken in 7.3 to 10.9m in the E part of the inner harbor.

**Caution.**—In 1993 it was reported that there are a growing number of unlighted marine farms distributed about the entrance to Glengarriff Harbor.

**Directions.**—Vessels proceeding into the inner harbor, and having passed Gun Point, should favor the E shore to avoid the foul ground E of East Garinish Island. Gun Point in range, 182°

astern, with Whiddy Point West leads close E of this danger. Course can be altered for the anchorage when Glengarriff Castle is sighted, or when Garvillan Island bears 270°.

**3.12** Between Gun Point and Ardnamanagh Point, about 1.7 miles SE, the dangers are contained within 0.2 mile offshore. An obelisk stands on the SW end of an islet close SE of Gun Point; a small beacon stands on a rock about 0.5 mile farther SE.

**Carrigskye** (51°43'N., 9°31'W.), the outermost danger, is usually marked by breakers; this low islet lies about 0.8 mile W of Ardnamanagh Point at the outer end of a rocky spit which extends about 0.4 mile offshore.

**Castle Breaker** (51°43'N., 9°30'W.), a detached 3.6m patch, lies on the N side of the approach to Whiddy Harbor, about 0.2 mile SW of Ardnamanagh Point.

The shore between Glengarriff Harbor and Whiddy Harbor is usually subject to a heavy swell that breaks violently over the off-lying rocks.

**3.13 Whiddy Island** (51°41'N., 9°30'W.), steep-to on its NW side, lies on the S side of the approach to Whiddy Harbor at the SE end of Bantry Bay. Three conspicuous circular forts, disused batteries, stand on the island. Several prominent tanks stand in the vicinity of the SW end of the island. Two groups of above-water rocks lie within 0.5 mile of Whiddy Point West, the SW extremity of the island. Whiddy Point East, its steep-to NE extremity, may be rounded at a distance of about 0.1 mile.

Whiddy Harbor, lying N and E of Whiddy Point East, is easy of access. Carrignagappul, a rock which dries 1.8m, lies in the N arm of the harbor, about 1 mile NE of Whiddy Point East.

Castle View, a white two-storied house, in the village of Ballylicky, 1 mile E of Carrignagappul, is conspicuous to vessels entering the harbor.

**Horse Islet** (51°42'N., 9°28'W.), 0.9m high, lies on the S side of Whiddy Harbor, about 0.5 mile SE of Whiddy Point East; a reef, which dries, extends about 0.1 mile W from it, and the flat on which the islet lies extends 0.2 mile from all sides, except the S, which is fairly steep-to. Clifly Rock, 0.6m high, stands on this flat, close N of Horse Islet. A shoal, with depths of less than 5m, extends 230m W from the N side of Gurteenroe Point, on the E shore about 0.4 mile SE of Horse Islet. A lighted buoy marks the E edge of the flat extending from the E side of Horse Islet. Gurteenroe lighted buoy marks the W edge of the shoal extending from the point of that name.

Anchorage may be taken, in 14.6 to 18.3m, with Whiddy Point East bearing between 273° and 284°, where a vessel will be sheltered from W gales.

**3.14 Bantry Harbor** (51°41'N., 9°29'W.), lying SE of Whiddy Island, affords security against all winds and sea, in 7.3 to 11m, mud, with fairly regular depths. The channel leading into the harbor S of Whiddy Island is available only to small craft. There are general and bulk cargo berths in the harbor having alongside depths of up to 4.5m.

Chapel Islands, two in number, each about 18m high, lie close together in the middle of the harbor, about 0.4 mile S of Horse Islet. A shoal, with depths of less than 5m, which dries in places, extends about 0.1 mile from the NE and SW

extremities, and to a lesser distance on either side. Chapel lighted buoy marks the E edge of the shoal extending from the NE extremity of Chapel Island East.

Hog Islet, 4m high, lies near the N end of a shoal with depths of less than 5m, lying between Chapel Islands and the E side of Whiddy Island.

The channel leading into Bantry Harbor E of Horse Islet is preferable to the channel passing W of the islet. The E channel is about 320m wide with depths of over 15m, reducing to depths of 8 to 10m, SE of the Chapel Islands.

**Caution.**—Mussel fishing rafts may be found in the waters E of Whiddy Island, outside the buoyed channels. They may extend in strings or consist of lines of barrels which are sometimes difficult to see.

In 1993 it was reported that there was a rapid expansion of unlighted marine farms in the area W of Eagle Point.

**3.15 Bantry Bay Oil Terminal** (51°41'N., 9°32'W.) is located near the SW extremity of Whiddy Island.

**Depths—Limitations.**—The terminal consists of a center platform and mooring dolphins, which form a jetty 488m in length, extending about 396m offshore. The terminal is capable of accommodating tankers of over 300,000 dwt and has depths alongside the berth of 29.5 to 30.5m.

**Pilotage.**—Pilotage is not compulsory in Bantry Bay, but is compulsory for tankers transiting Bantry Bay to the oil terminal. All vessels arriving in Bantry Bay should contact Bantry Bay Harbor Radio on VHF channel 14 or 16.

**Caution.**—The terminal was severely damaged by the explosion of a tanker vessel in 1979. In October 1990, it was reported that direct jetty discharge to the storage facilities had been resumed.

The platform is lighted with temporary lights and should be approached with caution.

Passage is prohibited between Whiddy Island and the terminal due to the submarine high tension cables and pipelines laid between the jetty and the shore.

A tanker mooring buoy, surrounded by a restricted area and a prohibited anchorage area best seen on the chart, lies about 0.6 mile N of the terminal.

**3.16 Crow Head** (51°35'N., 10°10'W.) is a narrow promontory, 74m high, extending about 1 mile SW from the mainland, 4 miles W of Black Ball Head. A rock which dries, and is generally marked by breakers, lies about 0.2 mile SW of the extremity of the head.

Dursey Island, 250m high, with an old watch tower on its summit, lies 1.5 miles WNW of Crow Head. It is a good mark for vessels bound for Bantry Bay.

The Calf and Heifer, two above-water rocks, lie close together about 0.7 mile SW of Dursey Head, the SW extremity of Dursey Island. A conspicuous red pillar, the remains of an old lighthouse, stands on The Calf. The channel between the rocks and the dangers fringing Dursey Head is subject to 3.5 knot currents at springs.

**Dursey Sound** (51°36'N., 10°09'W.), the narrow channel between Dursey Island and the mainland, should only be attempted by vessels with local knowledge and under favorable conditions.

The dangers W of Dursey Island have previously been described.

**Cod's Head** (51°40'N., 10°06'W.), about 5 miles NE of Dursey Island, is formed by a barren spur terminating to the W in high steep-to cliffs. A large bight, indented by two small bays, lies between the N entrance of Dursey Sound and Cod's Head to the NNE. During the summer, the bays are occasionally visited by coastal vessels, but should not be attempted by those without local knowledge.

The current about 3 miles W of **The Bull** (51°36'N., 10°18'W.) begins setting SE about 4 hours 20 minutes before HW at Cobh and the opposite current sets about 1 hour 45 minutes after HW at Cobh. Both currents attain a velocity of 1.5 knots at springs.

The current about 5 miles S of The Bull is more or less rotary in a clockwise direction and varies in velocity from 0.5 knot to 1.3 knots, according to direction and time before and after HW at Cobh.

Between Dursey Head and The Bull, the current setting E begins about 3 hours 45 minutes before HW at Cobh and the opposite current sets about 2 hours 30 minutes after HW at Cobh. The spring velocity of both currents is about 3 knots.

The currents follow the directions of the channels between the islands in a general N-S direction, except between The Calf and Dursey Head, where a SE-NW current is encountered.

## Kenmare River

**3.17 Kenmare River** (51°45'N., 10°00'W.), a narrow, deep inlet extending about 22 miles ENE, is entered between Cod's Head and Lamb's Head about 4.5 miles NNW. The bold, high land on both sides of the entrance rises to elevations in excess of 305m. The rocky and indented shores are mostly foul and must be approached with caution. Small vessels can find shelter in the bays on either shore. Large vessels anchor near the head of the inlet.

**Scariff Island** (51°44'N., 10°15'W.), 252m high and precipitous, is the outer of a group of islands extending 4.5 miles W from Lamb's Head. Narrow deepwater channels lie between the islands and afford access to the river entrance for small vessels.

The flood and the ebb follow the direction of the shore within Kenmare River. The flood begins about 5 hours 20 minutes after HW at Galway and the ebb begins about 1 hour before HW at Galway. The spring velocity in the outer part is about 0.5 to 0.8 knot, increasing to a maximum of 1.5 knots farther in. With W gales, there may be a turbulence off **Deenish Island** (51°44'N., 10°13'W.) and **Dunkerron Islands** (51°52'N., 9°38'W.).

Between **Scariff Island** (51°44'N., 10°15'W.) and **Lamb's Head** (51°44'N., 10°08'W.), the currents set N when the flood sets into Kenmare River and S with the ebb. Slack water lasts for about 15 minutes between each change.

**3.18 Ballycrovane Harbor** (51°43'N., 9°57'W.), in the NE part of Coulagh Bay, about 6 miles ENE of Cod's Head, is entered between Ainrush Islet and the mainland N. The channel at the head of the harbor is narrowed to a width of 0.1 mile by the shoals on either side. Anchorage can be taken in 7.3 to 9.1m in the middle of the harbor.

**Kilmakilloge Harbor** (51°46'N., 9°50'W.), 6 miles NE of Ballycrovane Harbor, affords safe anchorage for small vessels against all winds. The harbor can be identified by a high, grassy precipice on the NE side of the entrance. The most secure anchorage is in Collorus Harbor, the W arm, but its entrance is encumbered by a shoal, leaving a channel on each side, less than 0.1 mile wide, with depths of 7 to 9.3m. Vessels with a draft of 3.7m can anchor in Bunaw Harbor on the N side of Kilmakilloge Harbor, but with NW winds there is a heavy sea in the harbor. Anchorage can be taken in 3.6 to 5.5m in the SE part of Kilmakilloge Harbor.

**Daniel Islet** (51°46'N., 10°01'W.) lies on the N side of the Kenmare River. Vessels without local knowledge should not approach this section of the shore within 1 mile or approach in depths of less than 41m.

**3.19 Sneem Harbor** (51°48'N., 9°53'W.) may be identified by Sherky Island and a large conspicuous hotel on the mainland, 1.5 miles farther NNE. Sherky Island, together with the islands and rocks in its vicinity, gives partial shelter to Sneem Harbor. Cottoner Rock, which dries, lies close N of the SW part of Sherky Island. During heavy weather, the breakers over the rock extend more than halfway across the channel toward the Pigeon Islands, which lie about midway between Sherky Island and Garnish Island, close off the N shore. Rossdohan Island, on the E side of the harbor, is surrounded by foul ground. The dangers SW of the island break heavily during unsettled weather and are dangerous to approach.

**Anchorage.**—Anchorage can be taken in 5 to 7m in the NE arm of the harbor, but both shores are fringed by foul ground. A rock, which dries, is marked by a beacon and lies 0.3 mile SSE of the hotel. Small vessels can anchor in 2.7 to 3m, in the inner harbor, NE of Garinish Island.

**3.20 Coongar Harbor** (51°49'N., 9°50'W.) indents the N shore of the river. Although fringed by foul ground, it offers temporary anchorage, in 16m, in its central part. Partial shelter can be obtained from the prevailing W swell.

With the exception of Kilmakilloge Harbor, the only secure anchorage for vessels of moderate size is found in the vicinity of **Lackeen Rocks** (51°50'N., 9°44'W.). Large vessels can anchor in 10 to 14.6m, E of the rocks in safety.

The best anchorages are found below and above the narrows. The outer anchorage is for large vessels and the inner anchorage for vessels with drafts of 6m and less.

The directions for entering the inner part of Kenmare River are indicated on the chartlet.

**3.21 Ballinskelligs Bay**, entered 4 miles N of Scariff Island, between **Hog's Head** (51°47'N., 10°13'W.) and Horse Island to the NW, is open to the SW and exposed to a heavy sea from that quarter. Anchorage can be taken in 14.6 to 16.5m, N of the low neck connecting Hog's Head to the mainland. During SW gales a heavy sea sets into this anchorage.

**Bolus Head** (51°47'N., 10°21'W.), which terminates in a precipice 183m high, lies about 4.5 miles NW of Scariff Island. A tower stands at an elevation of 283m about 0.5 mile NE of the head. Bolus Mountain, 407m high, stands about 1.5 miles NE of the head and is conspicuous.

**Puffin Island** (51°50'N., 10°24'W.), 166m high, lies close SW of Ballaghaneane (Ballagh Point), about 3 miles NW of Bolus Head. Both the island and the point can be distinguished by steep cliffs. A conspicuous television mast stands at an elevation of 368m, about 3.2 miles NE of Puffin Island. Puffin Sound is a rock-encumbered sound between Puffin Island and the point. It has a narrow passage, 45m wide, with a depth of 5.5m, through which the tidal currents run very strongly.

The current setting toward the coast divides W of **The Skelligs** (51°46'N., 10°32'W.) and sets SE and N in the direction of the coast. The currents from the opposite directions meet off The Skelligs and set seaward. The spring velocity of all the currents is about 1 knot.

**Valentia Island** (51°55'N., 10°21'W.) lies on the S side of the entrance to Dingle Bay with high land at each end and prominent slate cliffs. Bray Head, the SW extremity of the island, is bold and precipitous and is located about 2.7 miles N of Puffin Island. Conspicuous disused quarry workings are situated along the NW side of the island. A conspicuous hill, 267m high, with a radio mast, 30m high, standing on the summit, is situated on the N side of the island, about 4 miles NE of Bray Head.

The N side of the island between **Fort Point** (51°56'N., 10°19'W.) and Knightstown, at the NE extremity of the island, forms the S side of Valentia Harbor. The SE side of the island forms the NW side of Portmagee Channel.

Portmagee, at the W end of Portmagee Channel, is entered from W between Bray Head and the islands and rocks fronting the coast between **Doon Point** (51°53'N., 10°24'W.) and Reencaragh Point, about 0.5 mile N.

North of Reencaragh Point, the channel narrows and the fairway lies off the N shore; this shore should be given a berth of about 90m in order to avoid a rock, awash, E of Reencaragh Point.

Local knowledge is necessary to proceed through Portmagee Channel to Valentia Harbor as the navigation is intricate and the channel obstructed by rocks. There is, however, sufficient water to carry a 4.6m draft through at HWN. A bridge, with a 10.7m wide opening, spans the channel about 90m E of Port Magee Pier.

Small vessels can anchor in 5.5 to 9.1m within Portmagee, but in unfavorable weather a heavy sea sets into the entrance. Anchorage can be taken in 3.6 to 5.5m E of Reencaragh Point, but it is necessary to moor.



## Valentia Harbor (51°56'N., 10°18'W.)

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**3.22** Valentia Harbor (Valencia), entered between Fort Point and Beginish (Beginnis) Island to the NE, provides shelter against all winds and sea and is easy of access. The harbor is used by fishing boats and small vessels.

**Winds—Weather.**—During NW gales the sea sometimes breaks across the narrow entrance.

**Tides—Currents.**—Spring tides rise 3.4m and neap tides rise 2.7m.

**Depths—Limitations.**—The least depth on the entrance range is 5.8m at LWS, about 9.4m at springs, and 8.8m at neaps. There are depths of 9.7 to 18.3m in the S part of the harbor.

The entrance channel is reduced to a width of 90m by the foul ground extending from Fort Point and the W end of Beginish Island.

Harbor Rock, which dries, lies on the SW side of the entrance range, about 0.3 mile SE of Fort Point; a lighted beacon stands on the rock.

Raccoon Rock, with a least depth of 4.5m, lies within Beginish Patch on the NE side of the fairway opposite Harbor Rock.

The channel between the NE extremity of Valentia Island and Reenard Point on the mainland to the E is narrowed to a width of about 0.1 mile by shoals which extend from each shore. The drying spit on the W side of the channel is known as The Foot.

The harbor consists of a sheltered anchorage, with depths of 4 to 14m, and two small piers, one at the E end of Valentia Island and the other on the mainland close E. It is reported (1990) that the pier at Reenard Point is in a dangerous condition, and that access and use is prohibited.

**Aspect.**—The former pilot lookout tower is conspicuous and stands on the summit of Beginish Island at an elevation of 63m.

Range lights and beacons stand on the W side of Valentia Island and indicate the entrance to the harbor.

**Pilotage.**—Licensed pilots are not available, but fishermen with local knowledge can be obtained.

**Anchorage.**—The berth with the best holding ground is in 12.8m, sand and clay, with the light on Fort Point in range with the first hollow N of Cruppaun Point, bearing 275°, and the lifeboat station bearing 140°.

Vessels with a draft of less than 5.5m can anchor in Portmagee Channel in a depth of 9m.

During spring and early summer the anchorage S and E of Knightstown is usually occupied by fishing vessels.

## Dingle Bay

**3.23** Dingle Bay, entered between Valentia Island and The Blaskets to the NW, is deep and clear in the entrance and shoals gradually toward its head. Like the other open bays along this coast, it is exposed to the full force of the sea and swell from W and can be used only as a temporary anchorage.

Vessels of moderate draft can obtain sheltered anchorage in Valentia Harbor on its S side and in Ventry Harbor on its N side.

**Dingle Harbor** (52°08'N., 10°17'W.), on the N shore, is a busy fishing port. There is a marina and a basin suitable for deep water fishing vessels with drafts of 5m. A basin having a depth of 2.6m lies E of Dingle Pier. The entrance channel is dredged and marked with lighted buoys.

Castlemaine Harbor at the head of the bay is obstructed by a shallow bar and dries over most of its area. Caution should be exercised when attempting to enter Castlemaine Harbor, as the charts of the area are based on antiquated surveys and there are no beacons, buoys, or leading marks.

The land on both sides of the bay is high and bold, especially on the N side, where the Brandon Mountains attain an elevation of 949m. Mount Eagle, which rises in precipices to an elevation of 513m, stands about 2.5 miles W of Ventry Harbor and is conspicuous. **Doulus Head** (51°57'N., 10°19'W.), 104m high, on the S side of the entrance, is conspicuous from seaward and is backed by Killelan Mountain, 276m high.

The currents off the entrance of the bay set in a N-S direction, but little current is felt within the bay until within 2 miles of the bar fronting Castlemaine Harbor. The flood over the bar begins 6 hours after HW at Galway and the ebb at about the time of HW at Galway. The spring velocity is about 3 to 4 knots in both directions. The spring velocity in the narrowest part of the channel leading into Dingle Harbor is 2.5 knots in both directions with little current within the harbor. The currents in Ventry Harbor are negligible.

**Caution.**—Barrack Rock (52°01'N., 10°33'W.), Wild Bank, and The Blaskets have been previously described under "Off-lying Dangers" along with the directions for clearing them.

**Ventry Harbor** (52°07'N., 10°20'W.), on the N shore of Dingle Bay, is easy of access with sufficient anchorage space for several vessels of moderate draft. Being open to the SE, it is exposed to a swell from that direction. With W winds, the harbor is subject to heavy squalls from the mountains, but only a slight swell is raised.

There are depths of 14.6 to 21.9m between Parkmore Point, the W entrance point, and Paddock Point, the E entrance point, decreasing to 7.3 to 8.2m at the anchorage about 1 mile within the harbor. A sunken ledge extends about 0.3 mile offshore, about 0.5 mile within Paddock Point. Two above-water black rocks lie close SE of Parkmore Point.

The best anchorage is near the middle of the harbor, in 7.6m, with Ventry Church bearing 018° and Parkmore Point bearing 150°. A vessel of moderate draft should not approach in depths of less than 9.1m or bring the church to bear more than 350°.

**Directions.**—The entrance against the high land is difficult to identify when approaching from W or SW, but on nearer approach, the two black rocks off Parkmore Point will be seen. In the event that these rocks are not seen, the light on Fort Point, bearing 177° astern, and open W of Doulus Head, will lead to the entrance.

**3.24** Blasket Sound lies between the NE end of Great Blasket Island, the dangers N of it, and the mainland to the E. The narrowest part of the sound lies between the NE extremity of Great Blasket Island and Dunmore Head to the E, where its width is reduced to 0.7 mile by a narrow strip of rock extending from Dunmore Head and terminating W at a high conical rock, 44m high. From a short distance, this strip of rock appears as an island. Stromboli Rocks, consisting of several small pinnacles, with a least depth of 1.8m, lie in the channel W of this strip and breaks heavily in bad weather.

Vessels awaiting favorable weather to pass through the sound can take temporary anchorage in the small bay between Dunmore Head and **Slea Head** (52°06'N., 10°27'W.).

**Clogher Head** (52°09'N., 10°28'W.) is rugged and lies 2.5 miles N of Dunmore Head. Clogher Rock, a sharply pointed and prominent above-water rock, lies close off the head.

**Sybil Point** (52°11'N., 10°28'W.), about 1.7 miles N of Clogher Head, terminates in a bold precipice which rises to a height of 206m. The point has the ruins of a tower on its summit. The tower is not conspicuous, but the summit on which it stands is useful as a leading mark when traversing Blasket Sound.

A rock, 47m high, lies close SW of Sybil Point and drying rocks and shoals extend about 0.5 mile from the point.

Clogher Rock, in range 016° with the ruins of the tower, or the summit on which it stands, leads clear of the dangers in the sound, but passes over Barrack Rock.

The currents in the sound follow a general N-S direction at a velocity of 2 to 3 knots. The current setting N begins about 4 hours 45 minutes after HW at Galway and the opposite current about 1 hour 45 minutes before HW at Galway. Velocities of up to 4 knots are experienced in the narrow channels between the islands.

North of The Blaskets, the current setting N turns E toward **Brandon Point** (52°17'N., 10°10'W.) and when within 7 miles of the coast sets in a direct line to and from the River Shannon.

**3.25 The Three Sisters** (52°12'N., 10°25'W.) are three remarkable hills, about 0.5 mile apart, which stand on the coast between Sybil Point and the entrance to Smerwick Harbor, 3 miles NE. East Sister, 150m high, is the highest of the three hills.

**Smerwick Harbor** (52°12'N., 10°24'W.) is entered between East Sister and Dunacapple Islet about 1 mile NE. Sunken rocks lying between the islet and the shore on the E side of the entrance partially protect the harbor from NE winds.

During the summer, temporary anchorage can be taken within the harbor, but it should be avoided during the winter because of the heavy swells. The holding ground is mostly indifferent, but comparatively safe anchorage can be taken in a depth of 10.9m in Smerwick Roads, close to the W shore abreast the village, 0.7 mile S of East Sister, with the entrance point bearing 019°. The exposed anchorage in the middle of the harbor is not recommended.

A prominent radio mast, 126m high, stands on the E shore of the harbor.

Ballydavid Head lies about 0.8 mile NE of Dunacapple Islet. A prominent conical hill, 251m high, on which stands a signal tower, is situated close ENE of the head.

**Brandon Point** (52°17'N., 10°09'W.) is precipitous and lies about 13 miles NE of Sybil Point. The coast between is backed by mountain ranges which terminate near Brandon Head in high, bold, easily identified cliffs about 3.2 miles SW of Brandon Point. Brandon Head, together with several peaks in the vicinity including Masatiompan Hill, 760m high, close within the head, and Brandon Mountain, 949m high, about 2 miles S of it, form a most remarkable coastal feature.

A rocky bank with a least depth of 12.8m, lies 2.5 miles N Brandon Point. In heavy weather the sea breaks over it and the area should be avoided.

Brandon Bay is entered between Brandon Point and the NW extremity of a sandy peninsula about 4 miles ENE, which separates it from Tralee Bay. Being open to the N, it is exposed to the full impact of the Atlantic swell.

There is anchorage for small vessels in a depth of 6m, E of the pier at Brandon. This anchorage is safe with offshore winds, but should not be used with onshore winds or on the approach of bad weather.

**The Seven Hogs** (Magharee Islands) (52°20'N., 10°03'W.) are a group of islands which lie N of the N end of the sandy peninsula which separates Brandon Bay from Tralee Bay. Rocky patches over which the sea breaks, extend to the N of the islands as far as the 20m depth contour. Magharee Sound leads between the extremity of the sandy peninsula and the islands. This narrow, intricate passage has a least depth of 4.5m, but should not be attempted without local knowledge.

Between the Blasket Islands and Kerry Head, the currents set in the direction of the coast and across the entrances of Smerwick Harbor, and Brandon, Tralee, and Ballyheige Bays. The current setting NE begins about 5 hours after HW at Galway and the opposite current about 1 hour 20 minutes before HW at Galway. The spring velocity in both directions is 1 to 1.5 knots, except in Magharee Sound where the velocity is 2 to 3 knots. During W gales, a heavy breaking sea makes up in the sound with an opposing current.

**3.26 Tralee Bay** (52°17'N., 9°56'W.) is entered between Rough Point, the NE extremity of the sandy peninsula, and Kerry Head, about 6 miles NNE. It is open to the prevailing wind and swell and affords little shelter, except in Fenit Harbor.

**Kerry Head** (52°25'N., 9°57'W.), the N entrance point of the bay, is a bluff headland, 68m high, and steep-to; the S side of the headland extends E and S forming Ballyheige Bay.

**Mucklaghmore** (52°20'N., 9°56'W.), a rock, 30m high, with a drying rock close N of it, is located about 4.5 miles S of Kerry Head in the N part of the bay. Illaunnabarnagh, a flat-topped rock, 9m high, lies 0.8 mile E of Mucklaghmore. Boat Rock, which dries, lies 0.7 mile ENE of Illaunnabarnagh. Vessels entering the bay should pass to the W of Mucklaghmore.

**Fenit Island** (52°18'N., 9°53'W.), at the S end of Ballyheige Bay, is connected to the mainland by a narrow, stony embankment at its S end. The island forms the W side of Barrow Harbor, suitable only for small craft.

The Rose, an islet, lies on the N end of foul ground that extends 1 mile W from the N end of Fenit Island.

Little Samphire Island lies on the N side of the approach to Fenit Harbor, about 1 mile S of Fenit Island. A main light is shown from a conspicuous blue round tower, 17m high, surrounded by a stone wall. The light tower and attached buildings entirely occupy the small island.

Samphire Island, at the W end of Fenit Harbor, lies about 0.7 mile E of Little Samphire Island.

### **Fenit Harbor (52°16'N., 9°52'W.)**

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**3.27** Fenit Harbor is formed and protected by a causeway connecting Samphire Island to the mainland and by a pier extending E from the same island. The port is used as an oil rig supply base for the offshore industries off the W coast of Ireland.

**Tides—Currents.**—Spring tides rise 4.9m and neap tides rise 3.7m.

Although the currents are weak in the outer part of Tralee Bay, a velocity of about 1.5 knots is attained in both directions off Fenit Pier. Toward the head of Tralee Bay, the currents run strongly to and from the River Lee.

**Depths—Limitations.**—The fairway to the harbor leads over a bar extending SW from Fenit Island, then close S of Little Samphire Island and Samphire Island. The channel is about 180m wide and bounded on the S side by shallow banks extending from the S shore of Tralee Bay. The approach channel has a depth of 4.8m.

A general and bulk cargo wharf, 198m in length, has a depth alongside of 6m at MLWS and another wharf, 305m in length, has depths of 3 to 4m alongside.

Vessels of up to 8,000 dwt, having a maximum length of 150m and a maximum draft of 5.8m may be accommodated.

**Aspect.**—Between **Ballyheige Castle** (52°23'N., 9°50'W.) and Fenit Island, about 5.5 miles S, the E shore of Tralee Bay is composed of ranges of low sandhills.

In clear weather, a vessel will have no difficulty in approaching Tralee Bay. Church Hill, upon which stand two churches, is an excellent landmark.

**Pilotage.**—Pilotage is not compulsory, but is available if required. Only vessels with local knowledge should enter the harbor at night without a pilot. Berthing is recommended from 2 hours before to 2 hours after HW.

The pilot vessel cruises in the vicinity of The Seven Hogs. In good weather, the pilot boards near The Seven Hogs. In bad weather, the pilot boards W of Samphire Island.

The vessel's ETA should be sent 24 hours in advance. The port can be contacted by VHF.

**Anchorage.**—Good anchorage, sheltered from all except N winds, may be obtained, in 8.2m, on the W side of Tralee Bay.

The anchorage on the E side of Tralee Bay is confined to the narrow channel, about 1.5 miles long, S of Samphire Island.

The best anchorage in Fenit Harbor is in 6.4m, about 0.2 mile NE of the pierhead, with Fenit Lodge, a square white building, about 0.6 mile N of the pierhead, bearing 340°; it is very narrow here, and a vessel could swing into a much shallower depth.

**Regulations.**—A copy of the by-laws and regulations can be obtained from the harbormaster.

**Directions.**—In heavy weather vessels seeking shelter should proceed to the mouth of the River Shannon where pilots can always be boarded or anchorage taken.

Approaching from W, Kerry Head should be steered for until The Seven Hogs have been cleared. When Mucklaghmore bears 125°, it should be steered for on that bearing until Loop Head Light is just open W of Kerry Head, bearing 004°. Alter course S with this bearing astern, passing between The Seven Hogs and Mucklaghmore. With the flood, a considerable set E will be experienced on this course.

When Little Samphire Island Light bears 131°, course may be altered to pass about 0.3 mile SW of it, crossing the bar. When the light bears 040°, a vessel may haul gradually around to the E, to the course up the channel, which is about 080°, but due allowance must be made for the tidal current.

### **River Shannon**

**3.28** The River Shannon, the largest river in Ireland, is entered between Kerry Head and Loop Head to the N. It offers spacious and secure anchorage for all classes of vessels, and is easy of access. Its wide entrance is easily identified by the conspicuous objects on both sides.

The river is tidal as far as Limerick, about 50 miles inland, and can be navigated by vessels with a draft of 5.5m. Above the city, the river traffic is confined to barges and small craft.

Between the confluence of the Fergus River, about 15 miles below Limerick, and the entrance of the River Shannon, navigation is possible at all stages of the tide, but above this the river shallows and is obstructed by rocks and flats. Navigation is possible only near HW.

### **Depths—Limitations**

River Shannon is navigable for all classes of vessels for 36 miles above Loop Head, or up to its junction with Fergus River, with depths in the channel of not less than 18m. In the estuary, however, there are charted depths of 16m, 2 miles SE of Kilcoher Head, where the fairway crosses Ballybunnion Bank for a short distance.

Above the junction the river is barred in several places, with a least depth of 0.9m in the fairway.

Deep draft vessels are usually lightened to 5.3m at springs for the passage between Foynes and Limerick.

## Tides—Currents

Although the River Shannon is said to enter the sea between Kerry and Loop Heads, the tides and currents of the lower reaches up to the junction of the Rivers Shannon and Fergus are those of a long deepwater inlet. The duration of rise and fall, and ebb and flood are nearly equal with little difference between the velocities of the ebb and flood. Above the junction of the rivers the characteristic river tides and currents are experienced, with a shorter duration of rise than of fall, and a shorter flood than ebb. The river tides and currents are fully developed off Limerick.

The currents in the estuary and river are greatly affected by the winds. South and W winds increase the velocity and duration of the flood and reduce the ebb. North and E winds have an opposite effect. After a prolonged period of heavy rain, the duration and velocity of the ebb is increased and the flood decreased. The effect is greatest off Limerick, but decreases gradually toward the mouth of the river.

Close outside the entrance and in the lower reaches of the river, the flood continues to set up to 30 minutes after local HW and the ebb sets up to 45 minutes after local LW.

South and W winds raise the sea level and N and E winds lower it.

## Pilotage

The Limerick Pilotage District comprises all navigable waters from Sarsfield Bridge in Limerick to a line joining Loop Head and Kerry Head, including Foynes Harbor. Pilotage is compulsory for vessels of more than 3,000 nrt NE of a line joining Kilcredaun Point and Kilconly Point, 1.8 miles SE. Pilotage is compulsory for vessels of over 50 nrt E of Scatterry Island.

Vessel's ETA should be sent 24 hours in advance and subsequently amended as necessary. Tankers over 1,600 grt must confirm that the vessel is properly manned and that navigation equipment, machinery and structure are in good order.

Pilots will normally board vessels with drafts of over 13m in a position about 3.5 miles SE of Loop Head. The boarding ground lies 0.8 mile S of Kilcredaun Head for those vessels exceeding 3,000 nrt, and for vessels of 3,000 nrt and less, the pilot boards 1 mile E of Rineanna, the S point of Scatterry Island. In SW gales the pilot cutter may direct vessels by VHF from a position NE of Beal Point.

The pilot station is located near Cappa Jetty, 0.7 mile SW of Kilrush, it is equipped with VHF radio. Pilots listen on channel 16 and work on channel 12 when vessels are expected; call sign is "Shannon Pilots."

Radio reporting points have been established E of Scatterry Island. E vessels are required to contact the Shannon Reporting System when close W of Money Point. W vessels should report from the calling-in-point abeam Colman's Point.



*Photo Courtesy of the Commissioners of Irish Lights*

### Loop Head Light

## River Shannon Estuary

**3.29** Between the entrance of the **Cashen River** (52°29'N., 9°41'W.) and Ballybunnion Castle to the N, the high sandhills along the shore are conspicuous from the offing.

**Beal Point** (52°35'N., 9°37'W.) is marked by several conspicuous sandhills.

Loop Head, the N entrance point of the estuary, terminates W in a steep precipice, 55m in elevation. The sea breaks on two rocks, 59m high, lying close N of the head.

A main light is shown from a prominent tower, 23m high, standing about 0.2 mile inside the extremity of the cape.

## River Features

**3.30 Carrigaholt Bay** (52°36'N., 9°42'W.), N of **Kilcredaun Point** (52°35'N., 9°41'W.), provides secure anchorage during W winds, but a short sea sets up with winds from the opposite quadrant. During SW gales, a long rolling swell sets in around Kilcredaun Point.

Vessels of moderate draft can take anchorage in 9.1m about 0.5 mile NNE of Kilcredaun Point, but the currents are strong. Small vessels can anchor farther N and closer inshore. Large vessels using this anchorage should moor due to the limited swinging room and strong currents.

**Scatterry Island** (52°37'N., 9°31'W.) is noted for the remarkable ruins on its slopes. A conspicuous tower, 26m high, stands on the N part of the island. Hog Island lies about midway between Scatterry Island and the mainland NE.

**Scatterry Roads** (52°36'N., 9°30'W.) lies E of the S end of Scatterry Island and provides sheltered anchorage during the prevailing W winds. Large vessels can anchor in depths of up

to 11m on the alignment, 260°, of Rineanna Point and Kelcredaun Hill, with the E end of Hog Island bearing 026°. Small vessels can anchor farther N to avoid the strong currents.

**Kilrush** (52°38'N., 9°30'W.) is situated about 1.5 miles NE of Scattery Island. The harbor consists of Cappa Jetty and a number of small quays which dry.

**Depths—Limitations.**—Kilrush Channel leads between Scattery Island and the mainland to the harbor and has a charted depth of 6.1m in the fairway. Vessels should keep to the SW side of the channel through the narrow passage E of Hog Island in order to avoid Wolf Rock.

Cappa Jetty has two berths alongside and the head is used by Shannon pilots. No 1 berth is 51m in length with a depth of 7.9m at MHWS; No 2 berth is 46m in length with a depth of 5.8m at MHWS.

Vessels of up to 3,000 dwt with lengths of 100m and drafts of up to 5m have been accommodated in the harbor.

The outer approach channel to the marina and marina berths is buoyed and dredged to a depth of 2.5m. The minimum maintained depth within the marina basin is 2.7m. Work was reported to continue to progress in 1993.

**Aspect.**—Two conspicuous chimneys standing at an elevation of 225m are situated on the N bank of the river about 3 miles SE of Kilrush.

**Ballylongford Bay** (52°34'N., 9°28'W.), on the S side of the river, SE of Scattery Island, is shallow and suitable only for small craft. Anchorage can be taken in about 12.8m, close N of the E entrance point of the bay.

**Ardmore Point** (52°35'N., 9°26'W.) lies on the S side of the river. Temporary anchorage can be taken in 9.1 to 10.9m in the small bay E of Ardmore Point, or in similar depths in the inlet about 1 mile ENE of Money Point, on the N side of the river in the position 52°36'N., 9°24'W. Both anchorages must be approached with caution.

**Tides—Currents.**—The spring velocity of the flood current in mid-channel at the entrance of the River Shannon is about 2.5 knots and the ebb about 4 knots. The flood begins about 5 hours 20 minutes before HW at Galway and the ebb about 45 minutes after HW. Off Tarbert Island, the flood begins about 5 hours before HW at Galway and the ebb about 1 hour after HW.

Both currents decrease toward **Kilconly Point** (52°33'N., 9°40'W.), but the flood increases and the ebb decreases toward Kilcredaun Point. Near the shore, the flood attains a velocity of about 3.7 knots at springs.

Between the river entrance and Scattery Island, the spring velocity in both directions is about 3 to 3.5 knots in mid-channel. South of the island, the flood increases to 4 knots and the ebb to 4.5 knots. When the wind and current are in opposition, heavy overfalls develop in the channel N of **Carraig Shoal** (52°35'N., 9°30'W.). E of the island, the flood decreases to 3.5 knots and the ebb to 3.8 knots. Both currents set very strongly across the ridge W of Money Point. During W gales, overfalls develop when the ebb is setting. E of the bridge, the velocities decrease, but increase again between Tarbert Island and **Kilkerin Point** (52°36'N., 9°20'W.).

The currents set in about the direction of the channel, but divide E or W of Scattery Island depending on the flood or ebb, passing N and S of the island and reuniting at the other end.

**Money Point Terminal** (52°36'N., 9°24'W.) is located on the N shore of the river, about 3 miles E of Scattery Island. The terminal supplies the coal-fired power station situated nearby and consists of a jetty with a berthing length of 380m and a depth of 25m alongside at MLWS. The berth can accommodate vessels of up to 180,000 dwt with drafts of up to 17m.

**3.31 Tarbert Island** (52°35'N., 9°22'W.), 1.5 miles SE of Money Point, is joined to the S shore by a causeway. The island is almost entirely occupied by a power station and its associated buildings. A ferry runs between a small pier at the SE end of the island and the N shore of the river.

**Depths—Limitations.**—At the W end of the island, a jetty extends NW for 275m to the tanker terminal, which consists of a breasting face 91m in length and mooring dolphins, forming a berth 320m in total length. The terminal has depths alongside of 14.5m at MLWS and can accommodate vessels of up to 80,000 dwt.

**Aspect.**—A light is shown from a prominent tower, 26m high, standing at the outer end of a short causeway extending from the N side of the island.

Two conspicuous chimneys with elevations of 159 and 129m stand at the power station. Groups of conspicuous oil tanks stand near the W end of the island and on the mainland about 0.2 mile SW.

**Anchorage.**—Tarbert Road, SE of Tarbert Island, is one of the best anchorages in the River Shannon, being sheltered from the prevailing W winds. The holding ground is good, but the currents are strong. Anchorage should be taken as close to the edge of the flats as safety permits in order to avoid the currents.

In Tarbert Roads, large vessels can anchor in about 10.6m with Tarbert Island Light bearing 321° and the storehouses in Tarbert Village, at the head of the drying bight SW of Tarbert Road, bearing 240°. In the channel abreast of the anchorage, the flood sets at a velocity of 3 knots and the ebb at about 3.8 knots.

Boland's Rock (Bowline Rock), which dries 1.2m, lies close off the N shore, about 1.2 miles E of Tarbert Island and is marked by a beacon.

**Caution.**—After passing Tarbert Roads, the S side of the river should be approached with caution due to the shoals.

**Glin Village** (52°34'N., 9°17'W.), with Glin Castle W of it, is located about 3.2 miles E of Tarbert Village. A pier, reported to be in a state of disrepair, extends from the shore N of Glin Village. During S winds, small vessels can take anchorage in 9.1 to 10.9m E of the pier, or farther E, in about 7.3m.

Carrigeen Rocks, composed of drying boulders, lies about midway between **Garraunbaun Point** (52°35'N., 9°14'W.) and Coalhill Point (Loughel Point), about 1.5 miles ENE, and about 0.2 mile offshore.

**Labasheeda Bay** (52°37'N., 9°15'W.), on the N shore opposite Garraunbaun Point, is entirely covered by a mudflat which almost dries. The outer edge of the flat is steep-to, especially near the middle of the bay. The anchorage off the entrance of the bay is considered to be one of the best in the river for small vessels, especially with N winds. The holding ground is excellent. Anchorage can be taken E of the W entrance point in 10.9 to 16.4m or 12.8 to 20.1m farther NE.

Care is necessary to avoid a detached 8.8m patch lying in about the middle of the latter anchorage.

**Tides—Currents.**—Off Tarbert Island, the flood attains a spring velocity of 3.5 knots in mid-channel and the ebb attains a velocity of about 4 knots. Off Rinealon Point, the flood begins about 4 hours 45 minutes before HW at Galway and the ebb begins about 1 hour 15 minutes after HW.

The velocities of the currents remain constant between Tarbert Island and the meridian of **Red Gap Point** (52°36'N., 9°15'W.) to the E, but then decrease as the channel widens, and increase again in the vicinity of Rinealon Point.

In mid-channel the current usually sets in the direction of the channel, but in the bend off Glin Village both currents set toward the S shore. Off Rinealon Point, the flood sets toward Foynes Channel and the ebb toward the shore E of Coalhill Point.

Eddies form with both the ebb and the flood on both sides of the channel between Tarbert Island and Rinealon Point.

### Foynes Harbor (52°37'N., 9°06'W.)

World Port Index No. 34130

**3.32** Foynes Harbor lies between Foynes Island and the mainland. The harbor serves as a base for the servicing of offshore oil exploration, as well as a commercial harbor for the import and export of bulk and general cargo.

**Tides—Currents.**—Spring tides rise 4.7m and neap tides rise 3.3m.

The tidal currents run through Foynes Harbor and channel in about the direction of the channel; the spring velocity in both directions is about 3 knots. The ebb current forms eddies over the banks on both sides of the W entrance to the channel.

**Depths—Limitations.**—There are two entrances to the harbor, that from W having a least depth over the bar of 8.1m, and that from E having a depth of 2.1m.

There are three deep-water jetties. West Pier, 107m long on its N face, can accommodate vessels of up to 167m in length with an alongside depth of 10.5m; on the W side of this pier there are berths totalling 140m in length with depths of up to 4.6m alongside. The E side of West Pier has a landing pontoon, but no berths.

East Pier has a length of 140m at its outside berth, with an alongside depth of 11.3m; the inside berth has a length of 125m and a depth alongside of 6.5m.

The East Pier Extension has an outside berth with a length of 155m and an alongside depth of 11.3m. The inside berth has a length of 140m and an alongside depth of 6.5m.

An oil berth, consisting of two dolphins connected to the shore by a walkway, is located close E of East Pier. Depths of 11m are available alongside.

Vessels of up to 40,000 dwt with lengths of 190m, beams of 27.5m, and drafts of up to 10.2m have been accommodated at the port.

Foynes Island Oil Terminal is located at the NW side of Foynes Island. The terminal consists of a jetty extending 200m NW from the island with a berth at the head. The berth is

formed by breasting dolphins and mooring buoys and has a depth of 15m alongside. Vessels of up to 60,000 dwt with lengths of up to 290m can be accommodated alongside.

**Aspect.**—The W entrance between the spit which extends 0.2 mile from the W extremity of Foynes Islands, and the bank that fronts the shore of the mainland, is marked by lighted and unlit buoys. The entrance is indicated by a range and the white directional sector of the front range light.

The E entrance channel is available only to small craft with local knowledge.

A conspicuous memorial cross stands on the high ground on the S side Foynes Island. A prominent hospital building with a flat roof, stands close S of the West Pier.

**Pilotage.**—Pilotage is compulsory. Pilots board at the entrance to the W entrance channel for vessels entering Foynes Harbor. The harbor can be contacted by VHF.

See River Shannon Pilotage.

**Anchorage.**—Vessels awaiting the tide or a berth at Foynes usually anchor outside the W entrance, about 0.6 mile NE of **Mount Trenchard** (52°36'N., 9°09'W.).

The best anchorage for small vessels is abreast the village in 10.9 to 12.8m, or farther E in 3.6 to 9.1m, close S of Foynes Island.

**Caution.**—A lighted buoy marks the extremity of a spit, with depths of less than 15m, extending across the river NW from Foynes Island.

**3.33** Aughinish Shoal, with a least depth of 5.2m, lies about 0.7 mile NW of **Aughinish Point** (52°38'N., 9°04'W.), the N extremity of Aughinish Island. Patches with depths of 7.6 to 8.2m lie N and NE of the shoal and are marked by lighted buoys.

**Aughinish Marine Terminal** (52°39'N., 9°03'W.) is located at the N extremity of Aughinish Island about 1.5 miles NE of Foynes Island. The terminal serves an alumina extraction plant which is situated on Aughinish Island. The terminal consists of an L-shaped jetty extending 1,000m N of the island with an outer berth having a depth of 12m alongside at LWS and an inner berth having a depth of 11m at LWS. Vessels of up to 70,000 dwt can be accommodated at the outer berth and vessels of up to 30,000 dwt at the inner berth.

Two conspicuous chimneys, 83 and 124m in elevation, stand at the alumina plant with three prominent large bauxite storage buildings nearby.

**Herring Rock** (52°38'N., 9°02'W.), which dries, lies about 0.8 mile E of the terminal jetty. Shoals extending 0.2 mile N from the rock to the S side of the main river fairway are marked by a lighted buoy.

Beeves Rock lies on the N side of the main channel leading up the River Shannon a little more than 1.5 miles ENE of Aughinish Island. A light is shown from a prominent stone tower, 18m high, standing on the rock.

Cork Rock and Wide Rock lie at the outer end of foul ground extending NW and NNE from Beeves Rock.

The Fergus River, entered about 1.5 miles NE of Beeves Rock, is navigable only by coasters and small craft.

**3.34** Above the Fergus River the River Shannon shallows and is obstructed by rocks and flats. Navigation is possible only near HW.

Beagh Castle is a conspicuous ruin standing on a point on the S side of the river, about 2.7 miles ENE of Beeves Rock Light.

The Shannon Airport control tower is conspicuous and stands on the N bank of the river about 2.5 miles E of the entrance to the Fergus River.

**Dernish Oil Terminal** (52°41'N., 8°55'W.) is situated on the N shore of the river about 2.7 miles E of the entrance to Fergus River, and serves as the jet fuel terminal for Shannon Airport, 1 mile N. The terminal consists of a jetty with a depth of 7.9m alongside at LWS. Vessels of up to 6,000 dwt having a maximum draft of 7m can be accommodated alongside the head.

**Middle Ground** (52°41'N., 8°53'W.), a long, narrow, drying shoal, lies in the middle of the river and extends about 4.5 miles E of Dernish Oil Terminal.

North Channel lies between Middle Ground and the drying coastal bank N. A 1.2m patch lies in the middle of the W entrance. The channel has a least depth of 2.7m in the fairway and is marked by lights and buoys. Lighted beacons, in range 093°, lead through the E part of North Channel. The front beacon stands about 0.5 mile ENE of **Sod Island** (52°41'N., 8°51'W.); the rear beacon stands on Quay Island (Cain's Island) in position 52°41'N., 8°49'W.

**South Channel** (52°40'N., 8°53'W.), entered S of Middle Ground, is obstructed in its W entrance by The Flats, a long narrow shoal with depths of 1.5 to 1.8m. Waller Bank, awash at its N end, lies close E of this shoal. The preferred channel passes N of these obstructions and has depths of 1.8 to 2.1m. The alignment, 170°, of **Pigott's Island** (52°40'N., 8°54'W.) and Castletown Manor, 0.9 mile S, a large white house, passes E of Waller Bank. South Channel is marked by lights and buoys.

**Bridge Rock** (52°40'N., 8°53'W.), a drying ledge lies across Middle Ground and is marked by a lighted buoy. Hall Rock, awash and marked by a red beacon, lies close W of the N rocks.

**Quay Island** (52°41'N., 8°49'W.), with ruins of a pilot lookout tower near its S end, lies close off the N shore at the mouth of the Bunratty River. Vessels bound for Limerick change pilots here.

The Maigue River flows into the River Shannon from the S shore opposite Quay Island. Anchorage can be taken in about 5.5m off the river entrance with the E extremity of Quay Island in range 354° with **Bunratty Castle** (52°42'N., 8°49'W.).

**Battle Islet** (52°40'N., 8°48'W.) lies in the middle of the River Shannon, about 0.5 mile SE of the mouth of the Maigue River. Both the islet and the bank on which it lies dry at low water. Navigable channels pass on both sides of the islet, but the deeper S channel is preferred.

**Logheen Rock** (52°40'N., 8°48'W.), which dries, lies close W of the drying bank which extends NW from Battle Islet.

**Spilling Rock** (52°40'N., 8°47'W.), on the outer edge of the drying coastal bank, about 0.5 mile SE of Battle Islet, has a 2.7m rocky patch close N of it and several rocky heads W of it.

Hogshead and Slate Rock, both drying, lie on the outer edge of the drying flats N of Spilling Rock. Dead Woman's Hand, a

rocky 1.5m patch, lies about midway between Slate Rocks and Spilling Rocks.

**The Scarlets** (52°40'N., 8°46'W.), an extensive rocky shoal with a tower on its S part, obstruct the S half of the navigable channel about 1.5 miles ENE of Battle Islet. The Whelps, a long bank of sand and mud with several drying rocks, lie in the middle of the channel close NE of The Scarlets.

The channel leads N of The Scarlets and Whelps, the greatest depths being found along the drying bank fringing the N shore.

Lighted beacons, in range 061°, lead through the channel N of The Scarlets and The Whelps. A light is shown on the N side of The Whelps from a rocky projection known as Ball of the Whelps. A light is shown from Flagstaff Rock, on the N side of the channel, about 0.5 mile E of Ball of the Whelps.

Kippen, Ardbane, Cratloe, and Horriks Rocks lie on the N side of the channel between Flagstaff Rock and Meelick Rocks, about 1.4 miles ESE. Flagstaff Rock Light, in range 302°, astern, with the rear light of the range leading N of The Scarlets and The Whelps, leads S of Ardbane Rock. Meelick Rocks lighted beacons, in range 106°30', lead S of Horriks Rocks.

Temporary anchorage can be taken, in depths of 2.4 to 4.2m, S of Meelick Rocks; small vessels finding they cannot reach Limerick with the tide anchor here.

The channel above Meelick Rocks narrows to a width of about 135m and maintains this width almost as far as Limerick.

Coonagh Point lies on the N shore, 0.2 mile NE of Braemar Point.

Cock Rock, a mass of rock on a gravel bed, extends about 275m into the channel from the W shore about 0.2 mile S of Coonagh Point. The fairway E of this rock is about 72m wide. Range lights, in range 146°, are located on Braemar Point, SE of Cock Rock, and lead through the channel E of the rock.

Lights are shown at Clonmacken, on the N shore, about 0.7 mile NE of Braemar Point, and at Spillane's Tower, on the S shore, nearly 0.8 mile ESE of Clonmacken.

Barrington's Quay, on the N shore, about 0.2 mile NE of Spillane's Tower, dries at its outer end. Between Spillane's Tower and Barrington's Quay there is a ledge of limestone rocks with a depth of 0.9m which extends nearly across the channel from the S shore.

The channel reach between Barrington's Quay and Limerick has general depths of 1.2 to 1.5m and is known as "The Pool."

From the entrance of the River Shannon to its junction with the Fergus River the tides and currents rise and fall normally with no great differences between the durations and velocities of the ebb and flood. Above the junction of the rivers, the characteristic river tides and currents develop rapidly.

High water occurs off Limerick about 1 hour 20 minutes after HW at Galway, and LW about 4 hours 30 minutes before HW at Galway. The actual time of low water, however, is uncertain for the tide falls regularly for about 6 hours. This fall is followed by a period of 2 to 2 hours 30 minutes with no tidal movement. The tides begin to rise about 2 hours 45 minutes before HW at Galway and rise very rapidly in the first hour, with a rise of up to 2.1 to 2.5m at springs.

The flood begins with a sudden rush as the tide begins to rise. After the first hour, as the drying banks in the river cover, the velocity decreases and remains moderate until after HW at Limerick. The ebb begins about 1 hour 45 minutes after HW at Galway and sets at a moderate velocity for about 3 to 3 hours 30 minutes, but increases and sets strongly for about 2 hours as the river banks dry, after which time there is little or no current.

The currents off Limerick are greatly affected by rainfall in the area drained by the river. After a long period of heavy rainfall, both the duration and velocity of the flood is reduced at springs, the only noticeable flood occurring during the first rush. At neaps there may be no flood.

### **Limerick (52°40'N., 8°38'W.)**

World Port Index No. 34110

**3.35** The port of Limerick, located 50 miles up the River Shannon and 95 miles SW of Dublin, is one of the principal W outlets of the extensive inland waterways of the country.

**Tides—Currents.**—The tidal rise is about 5.6m at springs and 4.1m at neaps.

**Depths—Limitations.**—The harbor is formed by the city reach of the River Shannon and a wet dock situated on the S side of the river.

Tidal quays totalling 457m are located along the S side of the reach. Charted depths in this part of the river are 0.2 to 2.1m. The quays are mainly used by coastal vessels of up to 1,000 dwt which lie aground on soft mud at LW.

Limerick Dock is a wet dock entered through an entrance 21.3m wide with depths over the sill of about 7.0m at MHWS and 5.2 at MHWN. The dock gates are usually open from 2 hours before HW to HW.

There are 10 berths within the wet dock, alongside which are maintained depths of up to 5.5.

Vessels exceeding 3,000 dwt enter at HW and in daylight only. Vessels with drafts of up to about 5.8m use the dock at springs. Vessels of up to 12,000 dwt, 152m in length and 19m beam with suitable drafts have entered the dock, but it is mainly used by vessels of up to 4,000 dwt.

**Pilotage.**—Pilotage is compulsory from Scattery Island to Limerick.

**Caution.**—A bridge crosses the river from Russell's Quay, 0.5 mile above the entrance, to Limerick Dock. The span is 16m wide and has a vertical clearance of 3.3m.